IBM Research

| Find | | News | Products | Support | Business solutions | InsideIBM | Interest groups |

Current publications

View by authors

View by disciplines

Databases

Data Mining

Digital Libraries

Internet Data Management

E-Commerce

Other Disciplines

Databases and Data Mining

- A. Thomasian. ``RAID5 Disk Arrays and Their Performance Analysis," Chapter 37 in *Recovery in Database Management Systems* V. Kumar and M. Hsu (Eds.), Prentice-Hall, Jan. 1998, pp. 807-846.
- J.-Y. Chung, C.-S. Peng, "An Optimistic Reliable Sequenced Broadcast Protocol," *Proc. International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'98)*, pp. 718-725, July 13 - 16, 1998, Las Vegas Hilton, USA.
- J. R. Smith, V. Castelli, A. Jhingran and C.-S Li, "Dynamic Assembly of Views in Data Cubes," *ACM Proc. Principles of Database Systems (PODS)*, June, 1998. [PDF]
- A. Thomasian, "Performance analysis of locking policies with limited wait-depth," *Performance Evaluation J.*, June 1998, 1-21.
- A. Thomasian, "Concurrency control: Methods, performance, and analysis," *ACM Computing Surveys* 30, March 1998, 70-119.
- A. Thomasian, "Distributed optimistic concurrency control methods for high performance transaction processing," *IEEE Trans. on Knowledge and Data Eng.*, Jan./Feb. 1998, 173-189.
- A. Thomasian, "Threshold policies for scheduling readers and writers," *Information Sciences*, Feb. 1998, 157-180.
- A. Thomasian, V. Castelli, and C.-S. Li, "Approximate Nearest Neighbor Searching in High-Dimensionality Spaces the Clustering and Singular Value Decomposition Method," *Proc. Voice, Video and Data Communication*, SPIE Photonic East, 1998.
- A. Thomasian, "Approximate analyses for fork/join synchronization in RAID5," *Computer Systems: Science and*

●   ●

Engineering, Sept. 1997, 329-337.

Digital Libraries

- C. S. Li, L. Bergman, V. Castelli, J. R. Smith, and A, Thomasian, ``Model-based mining of remotely senses data for environmental and public health applications," *Advances in Biomedical Image Databases*, S. Wong, (ed.), Kluwer Press, 1998.
- V. Castelli, et al ``Change detection with the NALC dataset," to appear in *Change Detection Techniques in Remote Sensing*, Ross Lunetta and Christopher D. Elvidge editors, Ann Arbor Press.
- J. R. Smith, "VideoZoom Spatio-temporal video browser," *IEEE Trans. Multimedia*, Vol. 1, No. 2, June, 1999. [PDF]
- J. R. Smith and C.-S. Li, "Image classification and querying using composite region templates," *Journal of Computer Vision and Pattern Recognition*, 1999. To appear. [PDF]
- J. R. Smith and S.-F. Chang, "Integrated Spatial and Feature Image Query," *Multimedia Systems*, Springer-Verlag, Vol. 7, No. 2, Mar., 1999. [PDF]
- J. R. Smith, "Digital Video Libraries and the Internet," *IEEE Communications Mag*, Special issue on the Next Generation Internet, Jan., 1999. [PDF]
- C.-S. Li, J. R. Smith, V. Castelli and L. Bergman, "Comparing Texture Feature Sets for Retrieving Core Images in Petroleum Applications," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VII* San Jose, CA, January, 1999.
- C.-S. Li, J. R. Smith, and V. Castelli, "Combining Indexing and Learning in Iterative Refinement," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VII*, San Jose, CA, January, 1999.
- J. R. Smith, V. Castelli and C.-S. Li, "Adaptive Storage, Retrieval of Large Compressed Images," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VII*, San Jose, CA, January, 1999. [PDF]
- J. R. Smith, "Query Vector Projection **Access** Method," *IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VII*, San Jose, CA, January, 1999.
- V. Castelli, L. D. Bergman, C.-S. Li, J. R. Smith, A. Thomasian, "Progressive **Content**-Based Retrieval of Satellite Image Databases through the Internet," *Proc. IEEE 10th Tyrrhenian International Workshop on Digital Communications*, Sept. 1998.
- V. Castelli, L. D. Bergman,C.-S. Li, and J. R. Smith, "Search and Progressive Information Retrieval From Distributed Image/Video Databases: The SPIRE Project," *Proc. The Second European Conference on Research and Advanced*

Technologies for Digital Libraries, Sept. 1998.

- J. R. Smith, "VideoZoom: a spatio-temporal video browser for the Internet," *Proc. SPIE Photonics West, **Multimedia** Storage, Archiving Systems III*, November, 1998. [PDF]
- J. R. Smith, R. Mohan and C.-S. Li, "**Content**-based transcoding of images in the Internet," *Proc. IEEE Proc. Int. Conf. Image Processing (ICIP)*, Chicago, Il, October, 1998. [PDF]
- J. R. Smith and C.-S. Li, "Decoding Image Semantics Using Composite Region Templates," *Proc. IEEE CVPR-98 Workshop on **Content-based Access** to Image, Video Databases*, June, 1998. [PDF]
- J. R. Smith, "Image Retrieval Evaluation," *Proc. IEEE CVPR-98 Workshop on **Content-based Access** to Image, Video Databases*, June, 1998. [PDF]
- C.-S. Li, R. Mohan and J. R. Smith, "**Multimedia Content** Description in the InfoPyramid," *IEEE Proc. Int. Conf. Acoust., Speech, Signal Processing (ICASSP)*, Seattle, WA, Special session on Signal Processing in Modern **Multimedia** Standards, May, 1998.
- C.-S. Li, J. R. Smith, V. Castelli and L. Bergman, "Sequential Processing for **Content**-based Retrieval of Composite Objects," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VI*, San Jose, CA, January, 1998. [PDF]
- C.-S. Li, J. R. Smith and V. Castelli, "S-STIR: Similarity Search Through Iterative Refinement," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Storage & Retrieval for Image, Video Databases VI*, San Jose, CA, January, 1998.
- A. Aho, S.-F. Chang, K. McKeown, D. Radev, J. R. Smith and K. Zaman, "Columbia digital news project: an environment for briefing and search over **multimedia** information," *ACM International Journal on Digital Libraries (IJODL)*, February, 1998.
- S. Paek and J. R. Smith, "Detecting Image Purpose in World-Wide Web Documents," *Proc. IS&T/SPIE Symposium on Electronic Imaging: Science, Technology - Document Recognition*, San Jose, CA, January, 1998. [PDF]
- C.-S. Li, P.S. Yu and V. Castelli, "Hierarchy-Scan, a Hierarchical Algorithm for Similarity Search of Databases Consisting of Long Sequences," to appear in Knowledge and Information Systems (KAIS) Journal.

Internet Data Management

- R. Mohan, J. R. Smith and C.-S. Li, "Adapting **Content** to Client Resources in the Internet," *IEEE Inter. Conf. Multimedia Comp. and Systems (ICMCS'99)*, Florence, June, 1999.
- R. Mohan, J. R. Smith and C.-S. Li, "**Content** Adaptation Framework: Bringing the Internet to Information
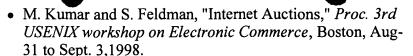
Appliances," *Globecom '99*, Dec., 1999.

- R. Mohan, J. R. Smith and C.-S. Li, "Adapting **Multimedia** Internet **Content** for **Universal Access**," *IEEE Trans. Multimedia*, Vol. 1, No. 1, Jan., 1999.
- M. Cohen:"Integrating Front End Web Systems with Back End Systems," at *Proc. INET 98*, Geneva, Switzerland, July 1998.
- R. Mohan, J. R. Smith and C.-S. Li, "**Multimedia Content Customization for Universal Access**," *SPIE Photonics East*, Boston, MA, November, 1998.
- J. R. Smith, R. Mohan and C.-S. Li, "Transcoding Internet **Content** for Heterogenous Client Devices," *Proc. IEEE Inter. Symp. on Circuits, Syst. (ISCAS)*, Special session on Next Generation Internet, June, 1998. [PDF]
- R.Mohan, "Video Sequence Matching," *Proc. Inter. Conf. on Acoustics, Speech and Signal Processing, (ICASSP)*, Seattle, May 1998.
- G. D. Hunt, G. Goldszmidt, R. King, and R. Mukherjee, "Network Dispatcher: a connection router for scalable Internet services," *Computer Networks and ISDN Systems*, pp. 347-357, 30 (7), April 1998.
- J.-Y. Chung, S.-K. Chen, "Accessing existing business data from the world wide web," *IBM System Journal*, Vol. 37, No. 1, March 1998.
- G. Goldszmidt and Y. Yemini, "Delegated Agents for Network Management," *IEEE Communications Magazine* - Special Edition on Network Management Paradigms, Editor Roch H. Glitho, Ericsson Research Canada, March 1998.

E-Commerce

- S. Fu, J.-Y. Chung, W. Dietrich, V. Gottemukkala, M. Cohen, and S. Chen, "A Practical Approach to Web-Based Internet EDI," *(ICDCS'99), 19th International Conference on Distributed Computing Systems Workshop on Electronic Commerce and Web-based Applications,* June 1, 1999, Austin, Texas, USA.
- L. Liu, J. Tian, J. Li, J. Chung , V. Guttemukkala, "Business-to-Business E-Commerce with Open Buying on the Internet," *(WECWIS'99), International Workshop on Advance Issues of E-Commerce and Web-based Information Systems,* Santa Clara, California, April 8-9, 1999.
- J.-Y. Chung, Tutorial on "E-commence and web applications," *Proc. IEEE International Conference on Parallel and Distributed Systems*, Tainan, Taiwan, Dec. 14-16, 1998.
- M. Kumar, A. Jhingran, R. Anand and R. Mohan, "Future of Sales Promotion on the Internet," *Proc. 3rd USENIX workshop on Electronic Commerce*, Boston in Sept 98.
- A. Jhingran and M. Kumar, "Tutorial: Database Research Issues in Electronic Commerce," *Proc. VLDB'98*, a copy of the tutorial can be found at the IAC site.

- M. Kumar and S. Feldman, "Internet Auctions," *Proc. 3rd USENIX workshop on Electronic Commerce*, Boston, Aug-31 to Sept. 3,1998.
- M. Kumar and S. Feldman, "Business Negotiations on the Internet," *Proc. INET'98*, Geneva, July 22-July 24 1998.

Other Disciplines

- G. Goldszmidt and G. Hunt, "Scaling Internet Services by Dynamic Allocation of Connections," *Proc. Integrated Management (IM 99)*, May 1999.
- M. Kumar, "Video-server designs for supporting very large numbers of concurrent users," *IBM Journal of Research and Development*, 42(2), March 1998. pp. 219-232.
- R. Agarwal, In conjuction with ISCA (International Symposium on Computer Architecture) PAID98 (performance Analysis and its Impact on Design) workshop was held at Barcelona, June 27-28, 1998. R. Agarwal gave an invited talk on "Performance Enhancements of ASCI Kernel Code".
- G. Goldszmidt, G. Hunt, R. King, and R. Mukherjee, "ND: A Connection Router for Scalable Internet Services," *Proc. of the 7th International World Wide Web Conference*, Brisbane, Australia, April 1998.
- G. Goldszmidt and Echiam Yemini, "Computing MIB Views via Delegated Agents," *Proc. IEEE Third International Workshop on Systems Management*, Newport, Rhode Island, April 1998.
- S. Handelman and S. Stibler, "Internet and Intranet Measurement and Service Analysis," *Proc. ICTEC*, Nashville, November 22, 1998.
- G. Goldszmidt, "Load Management for Scaling Up Internet Services," *Proc. of the IEEE/IFIP 1998 Network Operations and Management Symposium (NOMS 98)*, New Orleans, Louisiana, February 1998.
- B. E. Rogowitz, T. Frese, J. R. Smith and C. A. Bouman, "Perceptual Image Similarity," *Proc. IS&T/SPIE Symposium on Electronic Imaging: - Human Vision, Electronic Imaging III*, San Jose, CA, January, 1998.